

FIGURE 1

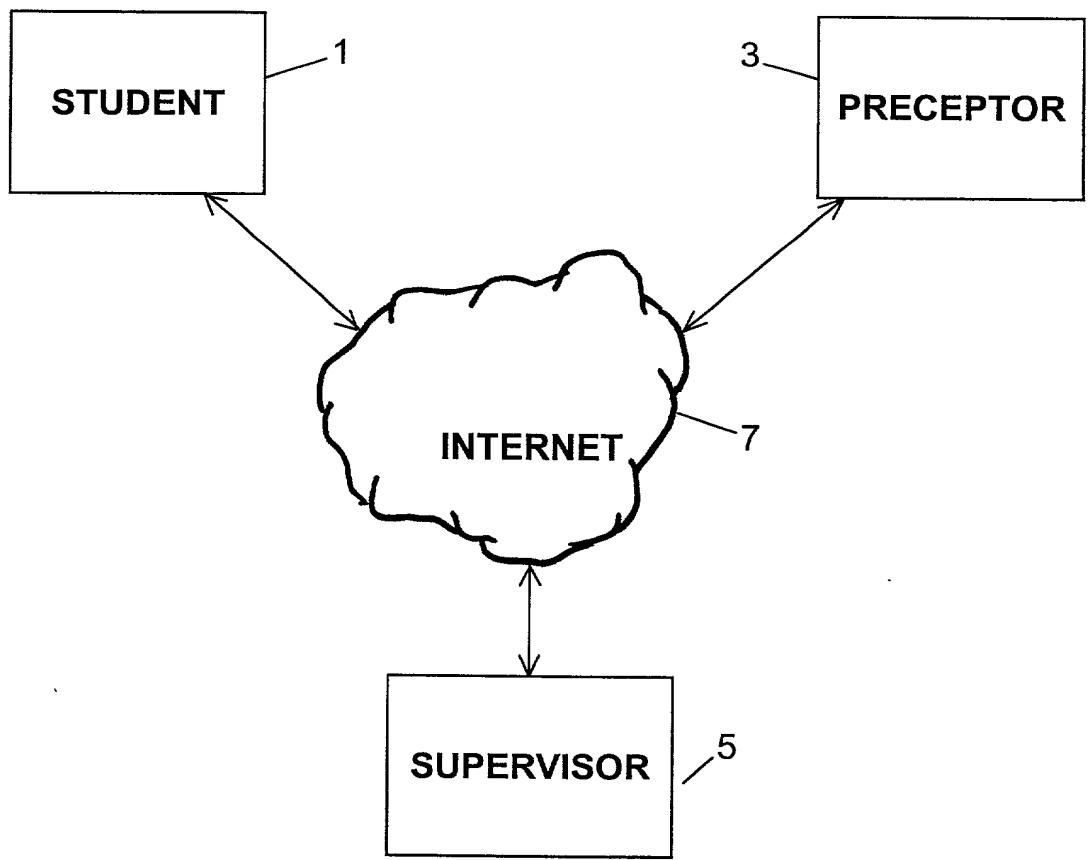


FIGURE 2

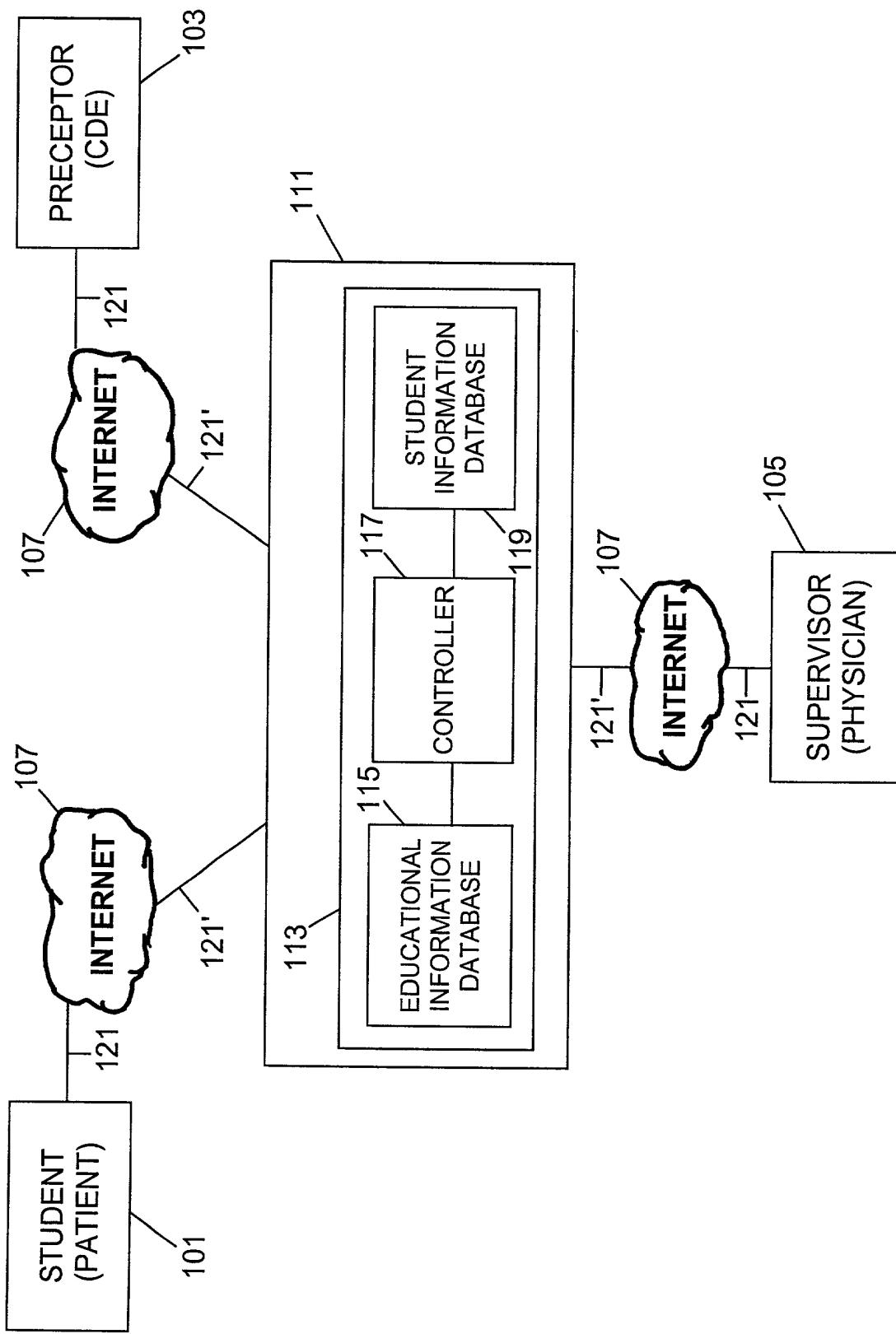


FIGURE 3

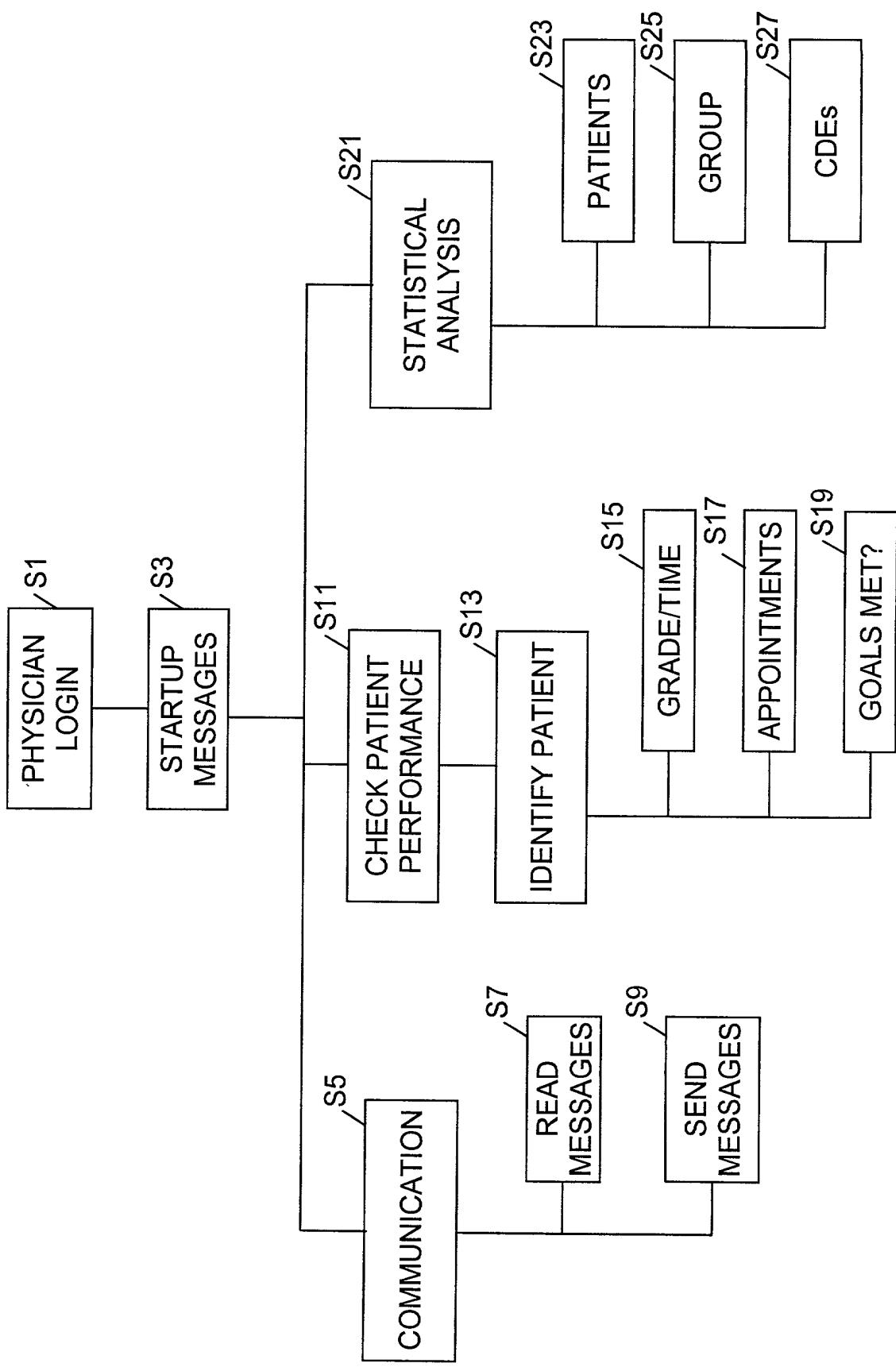


FIGURE 4

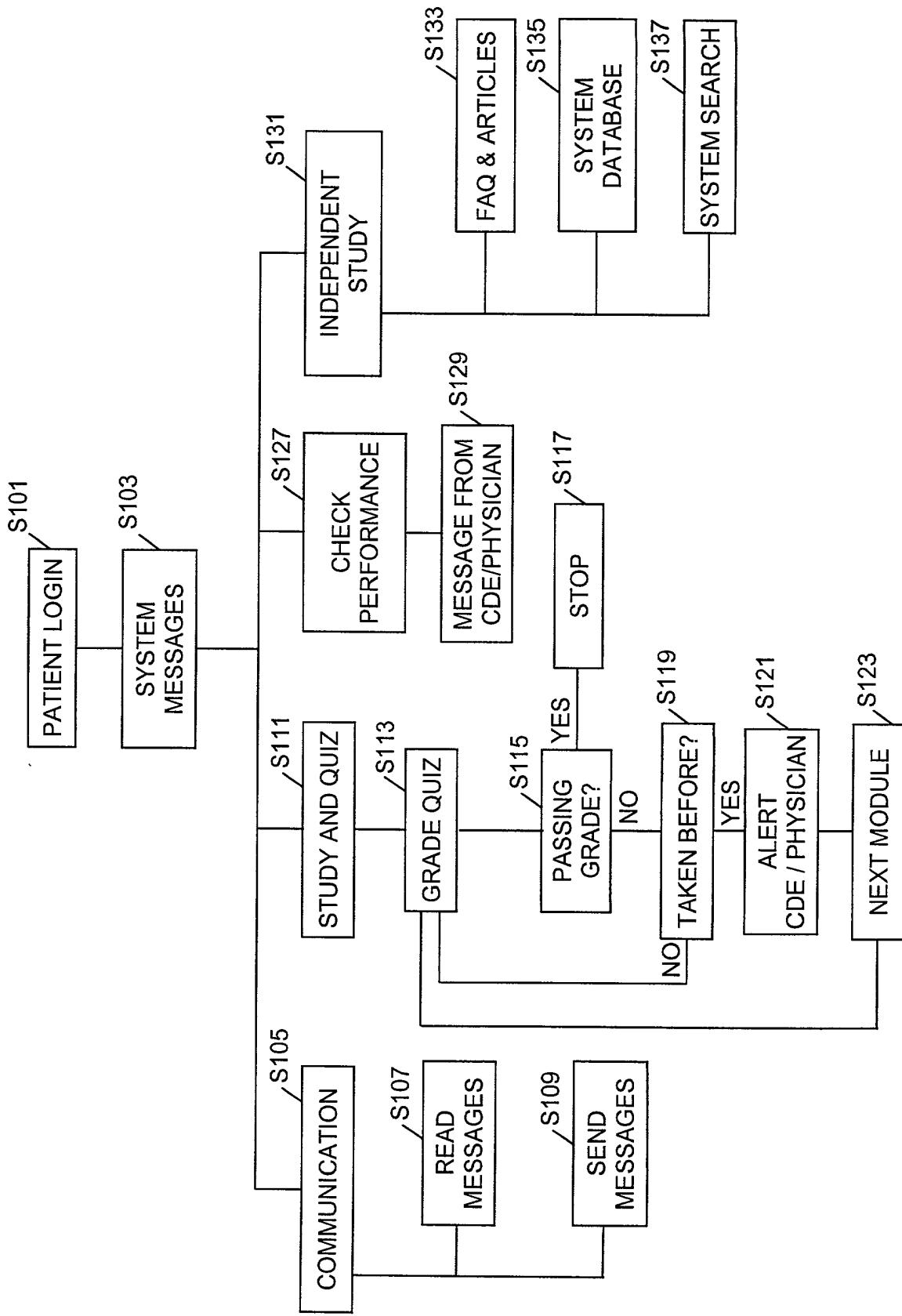


FIGURE 5

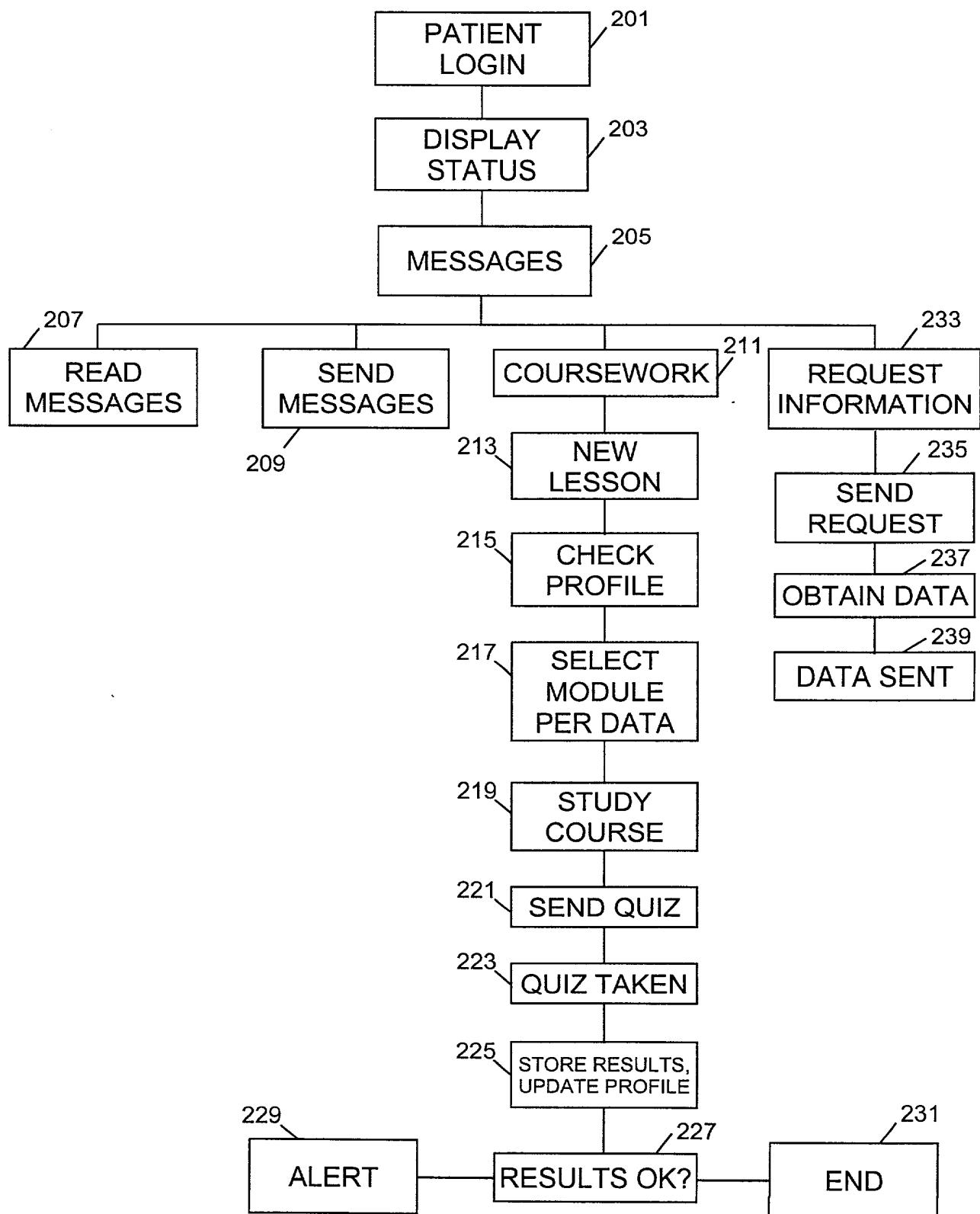


FIGURE 6

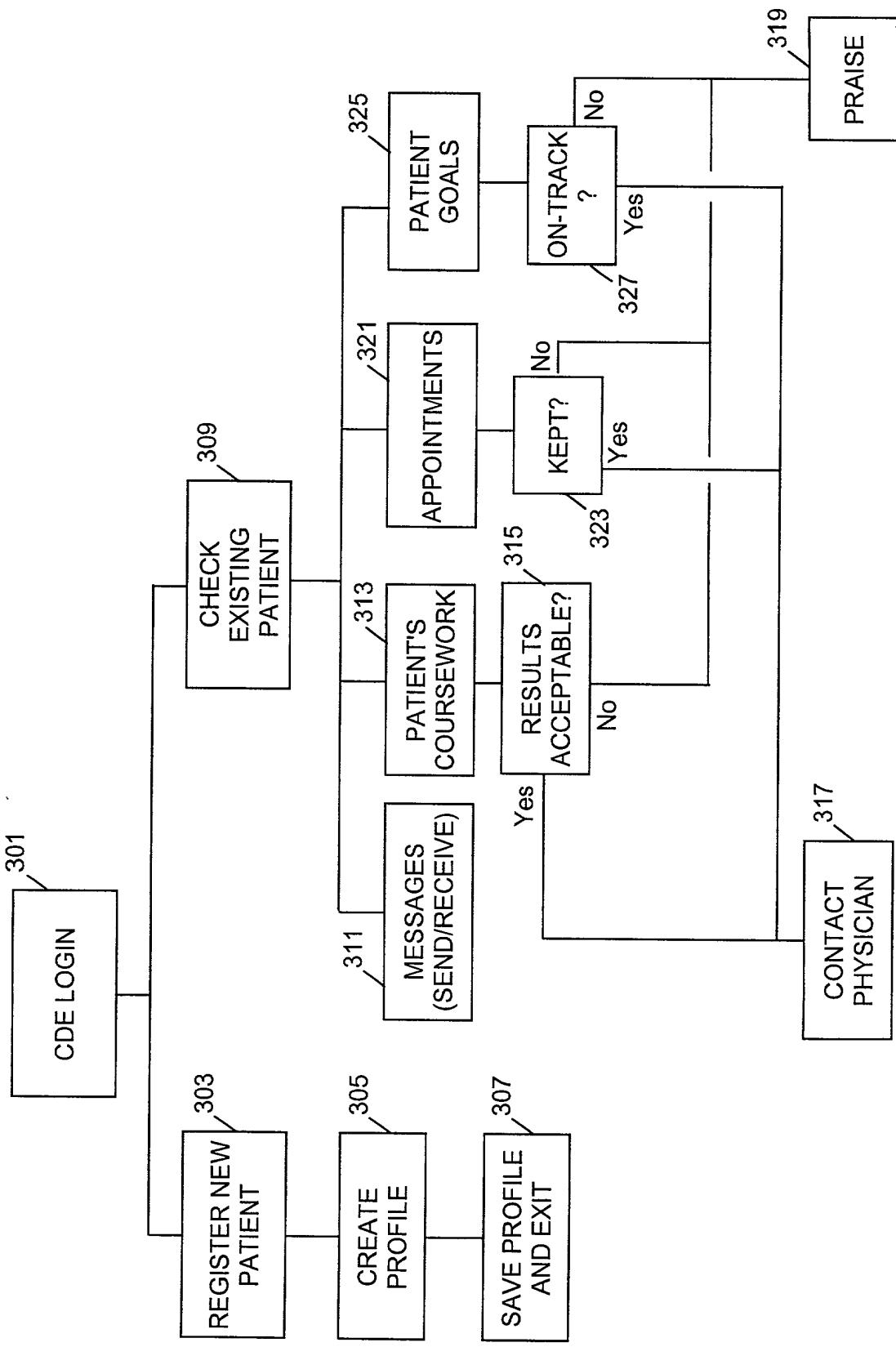




FIG. 7A



NOVOTRACK

Ralf Ackermann
Personal Scorecard

Physician
Geoffrey Gates, MD
Diabetes Control
A1c 7.5 %
Next Appointment
04/20/01
NovoTrack Progress
37 of 35 topics
completed
Message Center - 0



DIABETES

BIO BOX
HOME
MESSAGE CENTER
PERSONAL SCORECARD
GUIDE TO GOOD CARE

FAQS | Glossary | Credits | Legal | Home

TRACK

1 2 3 4 5 6 7

GUIDE TO GOOD CARE



PERSONAL SCORECARD

Get instant access
to vital info about
your diabetes from
your primary care
provider.



MESSAGE CENTER

Post a message to a
CDE who can answer
your questions about
diabetes.



Welcome to NovoTrack - your program to good diabetes care!
This program was designed for you. You will find what you need to know about diabetes in the Guide to Good Care, Personal Scorecard and Message Center.

Guide to Good Care is a course in 7 tracks with 35 topics that were chosen to fit you and your diabetes. We recommend that you start at the beginning, but you can start anywhere and complete the topics in any order. Remember to answer the questions after reading each topic. You can reach the course by selecting a numbered button at the top of this page.

Personal Scorecard gives you access to vital information about your diabetes from your primary care provider. Explanations of each test help you to understand where you are now and where you should be going to reach the goals of good diabetes care. The Personal Scorecard can be reached from this homepage on the right or from the BioBox on the left of each page.

Message Center is a secure way to send messages to a nurse in your physicians office who can find answers to your questions about diabetes. The nurse will be following your progress through the Guide to Good Care. Remember that you and your physician make all the decisions about your individual medical care. Message Center can be reached from this homepage on the right or from the BioBox on the left of each page.

You can reach this homepage at any time by clicking on "NovoTrack" in the upper left corner or the "Home" menu item at the top of each page.

Now you are ready to get your diabetes on track - NovoTrack!

FIG. 7B

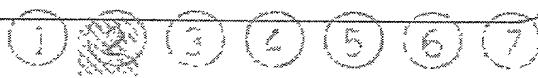


NOVO TRACK



TRACK

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TRACK 2

WHAT IS DIABETES?

Topics

Before You Had Diabetes

What Causes Diabetes

Effects of Diabetes

Who Gets Diabetes

Ralf Ackermann
Personal Scorecard

Physician
Geoffrey Gates, MD
Diabetes Control
A1c 7.5%
Next Appointment
04/20/01
NovoTrack Progress
37 of 35 topics
completed
Message Center - 0

DIABETES

This section explains how your body works and what happened when you got diabetes.

Before you had diabetes, your body automatically made adjustments to keep your blood glucose at just the right level. Now that you have diabetes, you have to think about it. You have to make decisions that your body once made for you.

This section will tell you how your body worked before you had diabetes and how it works now.

NEXT

FIG. 7C

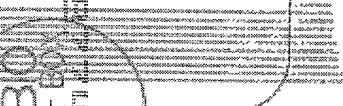


NOVO TRACK



Ralf Ackermann
Personal Scorecard

Physician
Geoffrey Gates, MD
Diabetes Control
A1c 7.5 %
Next Appointment
04/20/01
NovoTrack Progress
38 of 35 topics
completed
Message Center - 0



DIABETES

Personal Scorecard
Progress
Diabetes Control
A1c
Next Appointment
NovoTrack Progress
Completed
Message Center - 0

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TRACK 0 1 2 3 4 5 6 7

TRACK 2 WHAT IS DIABETES?

Effects of Diabetes

A Healthy Life

People with diabetes can live long and active lives. Knowing how to treat your diabetes can help you avoid the symptoms of high and low blood glucose. Maintaining good diabetes control over time reduces the risk of long term complications.

No one would want to have diabetes, but those who rise to the challenge of good diabetes care may find strengths that they never knew they had.

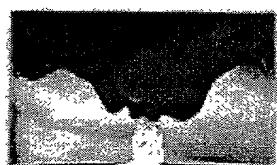


People can live long and healthy lives with diabetes.

High Blood Glucose

Both high and low blood glucose can cause symptoms that go away after the blood glucose returns to an acceptable level. In rare circumstances, extremes of either high or low blood glucose can lead to coma with results that may not be easy to reverse.

The symptoms of a very high blood glucose are thirst, excessive urination, fatigue, weakness and loss of weight. Other symptoms can occur including blurring of vision and difficulty healing wounds or fighting infections.



Thirst, excessive urination and other symptoms of diabetes do not occur until the blood glucose levels are extremely high.

When your blood glucose is very high, the body can flush some of the excess blood glucose out of your system by putting it into the urine. You get thirsty as your body loses more and more water in the sugary urine. Frequent trips to the toilet can disturb sleep and interrupt activities during the day.

If a high blood glucose is left untreated, you can begin to lose weight. The weight you lose is not a healthy weight loss. Even though the blood glucose is high, the glucose can't get into the cells so the cells don't get the energy they need to do their work. Muscle is being broken down to make even more glucose. This results in weakness and fatigue.



Loss of vision (and other long term complications) can be prevented by good diabetes care.

At a certain level of blood glucose, the brain cannot function well. The most severe consequences of an extremely high blood glucose are confusion and eventually coma. These complications can be prevented by the most basic diabetes care.

Low Blood Glucose

Low blood glucose is usually the result of treatment that is not matched to a person's needs. This topic is covered extensively in Section 2 Using Medications Wisely.

Long-Term Complications

The complications of diabetes are not inevitable. High blood glucose can damage many different organs in your body. How diabetes damages an organ is complex and not completely understood even by scientists who study these problems. It has been shown by a number of studies that maintaining good control of blood glucose reduces the risk of complications. Control of other risks such as high blood pressure and cholesterol can also reduce the risk of complications.



Weight loss because of

FIG. 7D(1)

Each of the major complications of diabetes is discussed at greater length in Track 6 Complications.

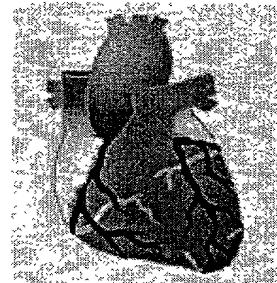
Heart Disease

You may not think of a heart attack as a complication of diabetes - but it is! People with diabetes are at greater risk of diseases caused by cholesterol that builds up and blocks vital arteries. People without diabetes can get blockage in an artery leading to a heart attack, stroke or other circulatory complication. Diabetes just makes all of these complications worse.

Fortunately, various treatments have been shown to reduce the risk of heart disease and other circulatory problems for people with diabetes. You can learn more about this subject in Track 4 Treating High Blood Pressure and Treating High Cholesterol and in Track 6 Heart Disease.

[Go To Questions](#)

high blood glucose is not healthy. A large part of the weight loss is muscle - with weakness and fatigue as a result.



Diabetes increases the risk of heart disease. Good diabetes care reduces the risk.

SEE HOW IT WORKS!



FIG. 7D(2)



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TRACK



TRACK 2

WHAT IS DIABETES?

Ralf Ackermann
Personal Scorecard

Physician
Geoffrey Gates, MD
Diabetes Control
A1c 7.5 %
Next Appointment
04/20/01
NovoTrack Progress
38 of 35 topics
completed
Message Center - 0



DIABETES

Frequent urination is always a symptom of diabetes.

- True
- False

[Back to Track 2.3](#)

[NEXT](#)



FIG. 7E



NOVO TRACK



TRACK

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1 2 3 4 5 6 7

PERSONAL SCORECARD

Ralf Ackermann
Personal Scorecard

Physician
Geoffrey Gates, MD

Diabetes Control

A1c 7.5 %

Next Appointment

04/20/01

NovoTrack Progress

37 of 35-topics
completed

Message Center - 0



DIABETES

TESTS

RESULTS

GOALS

REPORTS

HELP

How Am I Doing?

This is a good question to ask. Your personal scorecard helps you to answer this question.

Each of the test results to the right of this page has been selected with a purpose. Click on the test result to see an explanation of the test and its significance to your health.

Each test predicts the risk of one or more of the long-term complications of diabetes. For each test, treatment that moves the value toward the recommended goal is beneficial.

Not everyone can achieve the goals set by the American Diabetes Association and others. For some, these recommendations are not appropriate due to other medical concerns. You and your healthcare provider will need to decide goals that are appropriate for you. You can record these values by clicking the Personal Diabetes Goals at the bottom of the column to your right.

FIG. 7F

Personal
Care

Personal Goals

Blood Glucose Testing
Average 7 per week

Laboratory
Tests

Diabetes Control
A1c 7.5%

Kidney Health
Urine albumin 532

Cholesterol Profile
Total cholesterol - 211
HDL cholesterol - 40
LDL cholesterol - 110
Triglycerides - 346

Physical
Examination

Weight/BMI
150 lbs/32

Blood Pressure
160/100

Foot Sensitivity
sensitive

Eye Examination
10/25/01

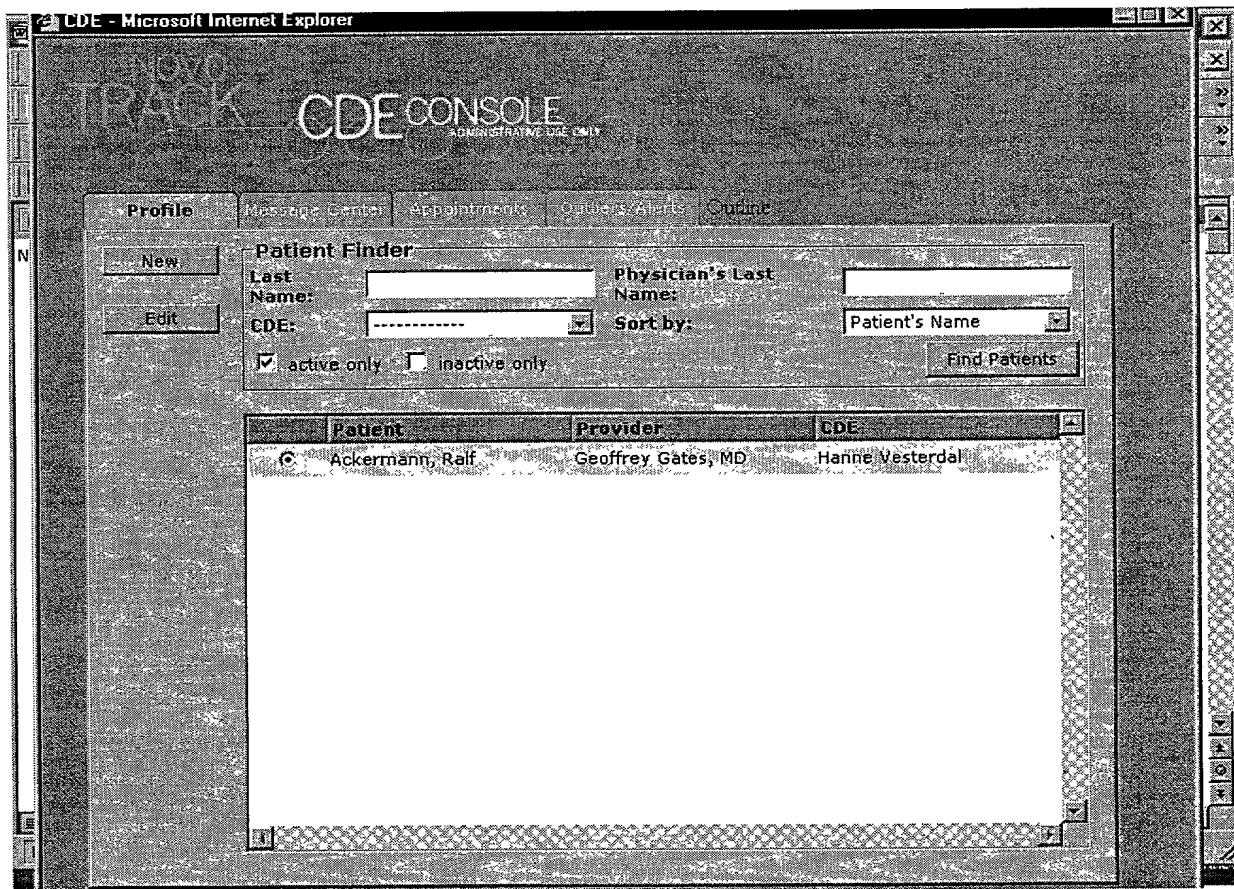


FIG. 7G

CDE - Microsoft Internet Explorer

RACK CDE CONSOLE
ADMINISTRATIVE USE ONLY

Profile Message Center Appointments Contacts/Aliens Other

User Name: ralf Inactive:
Password: **** Confirm Password:

CDE: Hanne Vesterdal Registration Date: 11/13/00

First Name: Ralf Last Name: Ackermann
Address:
City: State: Zip Code:
Phone: Email: rwa@novo.dk

Medical/Goals Req. Questions Track Progress Appt Goals Alerts

Save Cancel

This screenshot shows the 'Profile' section of the CDE Console. At the top, there's a navigation bar with links for 'Profile', 'Message Center', 'Appointments', 'Contacts/Aliens', and 'Other'. Below that, there are fields for 'User Name' (ralf), 'Password' (****), and 'Confirm Password'. A checkbox labeled 'Inactive' is checked. The 'CDE' field contains 'Hanne Vesterdal' and the 'Registration Date' is '11/13/00'. Under 'First Name' and 'Last Name', the values 'Ralf' and 'Ackermann' are entered respectively. There are also fields for 'Address', 'City', 'State', 'Zip Code', 'Phone', and 'Email' (rwa@novo.dk). At the bottom, there are several tabs: 'Medical/Goals', 'Req. Questions', 'Track Progress', 'Appt Goals', and 'Alerts'. Below the tabs are 'Save' and 'Cancel' buttons.

FIG. 7H

CDE - Microsoft Internet Explorer

CDE CONSOLE

ADMINISTRATIVE USE ONLY

Profile **Message Center** **Appointments** **Other Options** **Logout**

Patient: Ralf Ackermann Registration #: 201

Physician's First Name: Geoffrey Last Name: Gates Suffix: MD

Type of Diabetes: Type 2 Gender: Male Age: 41 Height: 178

Foot Care: High Risk Neuroathy: Absent

Nephropathy: Present Heart Disease: Present

Retinopathy: Absent

Test	Results	Date	Goal
edit A1c (%)	7.5	3/29/00	7.0
edit Urine Albumin	532	10/10/00	400
edit Total Cholesterol (mg/dL)	211	10/1/01	180
edit HDL (mg/dL)	40	12/13/01	40
edit LDL (mg/dL)	110	10/10/00	100
edit Triglycerides (mg/dL)	346	10/10/00	200
edit Weight (lbs)	150	10/10/00	180
edit BMI	32	10/10/00	26
edit Blood Pressure (mmHg)	160/100	10/10/00	135/80
edit Foot Sensitivity	sensitive	10/10/00	sensitive

Blood Sugar Goals

Number of Tests: 7 per week
 (specify per week or day)

edit Before Breakfast (mg/dL) 100-150
 edit Before Lunch/Dinner 80-140
 edit 2 hours after eating less than 200
 edit Bedtime (mg/dL) 120-160

Save **Cancel**

FIG. 7I

CDE - Microsoft Internet Explorer

CDE CONSOLE
ADMINISTRATIVE USE ONLY

Profile Message Center Appointments Online Alerts Options

Patient: Ralf Ackermann

1. Subjective Duration of Diabetes
Established patterns

2. Attitude Toward Future Complications
fatalistic

3. Level of Activity
sedentary

4. Frequency of Blood Sugar Monitoring
infrequent

5. Attitude Toward Smoking
smoker-does not want to quit

6. Attitude Toward Insulin
Type 2 rejects

Save Cancel Answer Key

FIG. 7J

CDE - Microsoft Internet Explorer

RASC CDE CONSOLE
Administrative Use Only

Profile Message Center Appointments Outliers/Alerts Curing

< Back

Patient: Ralf Ackermann

Topic #	Topic	Date Completed	Minutes	Questions Correct
5.4	Asking for Help	05/09/01	1	0 of 3
1.4b	Proof That Good Care Matters	03/14/01	1	3 of 3
5.1b	A Healthy Attitude	03/16/01	30	2 of 3
4.1b	How Diabetes Medications Work	03/29/01	7	0 of 3
6.5b	Treating Heart Disease	11/20/00	2	3 of 3
2.2b	What Causes Diabetes	03/29/01	20	3 of 3
6.7	Dental Care	05/09/01	2	0 of 3
4.4b	Hypoglycemia	03/29/01	1	0 of 3
4.7	Treating High Blood Pressure	03/29/01	2	0 of 3
4.6	Treating High Cholesterol	05/17/01	23	3 of 3
6.1a	Preventing Retinopathy	05/09/01	2	0 of 3
6.4b	Foot Care	05/09/01	0	0 of 3

FIG. 7K

CDE - Microsoft Internet Explorer

CDE CONSOLE
ADMINISTRATIVE USE ONLY

Profile Message Center Appointments Gather & Alerts Outcome

Patient: Ralf Ackermann

Physician

Date of last Physician Appointment:

Next Physician Appointment Goal:

Actual Physician Appointment:

*NOTE: Dates must be entered in the following format: m/d/yy or mm/dd/yyyy

Ophthalmologist

Date of last Ophthalmologist Appointment:

Next Ophthalmologist Appointment Goal:

Actual Ophthalmologist Appointment:

*NOTE: Dates must be entered in the following format: m/d/yy or mm/dd/yyyy

Save Cancel

FIG. 7L

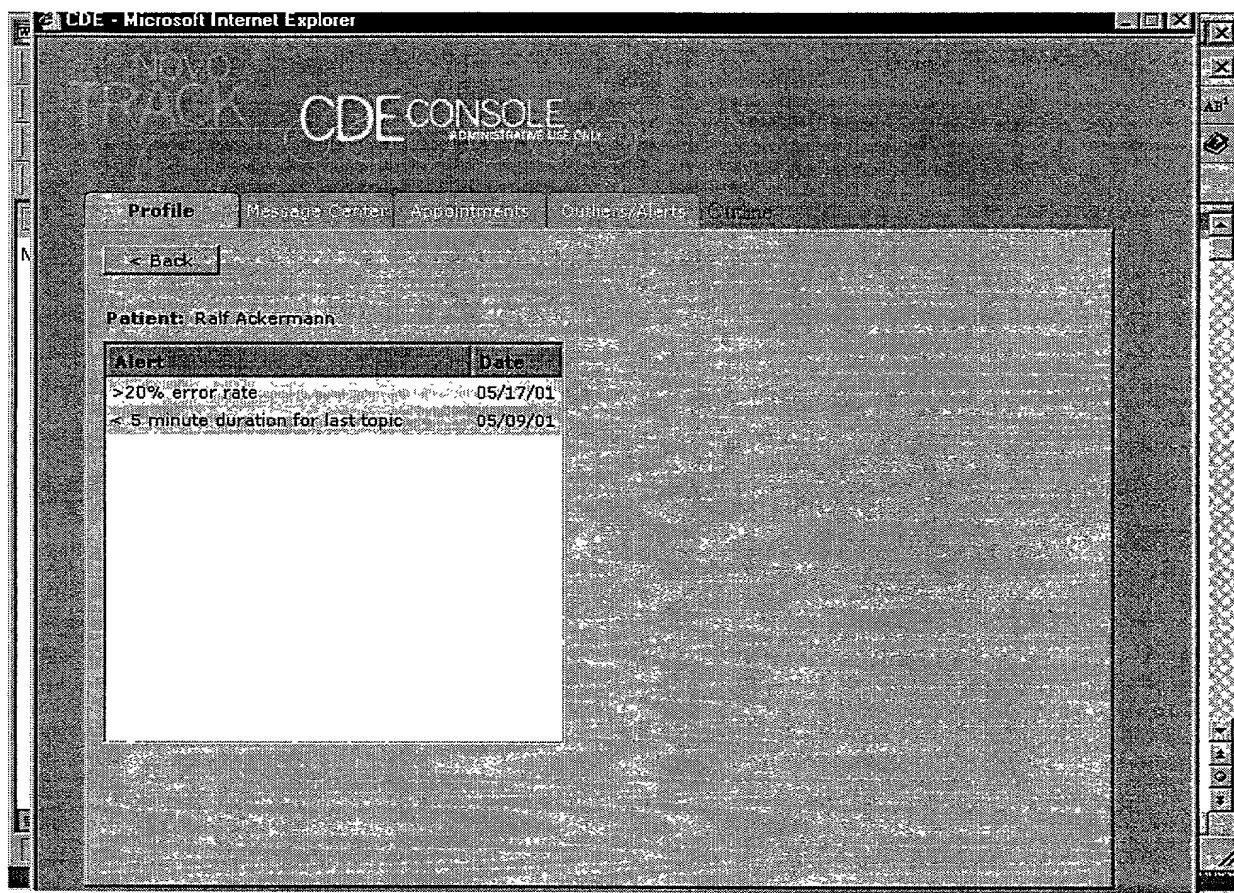


FIG. 7M

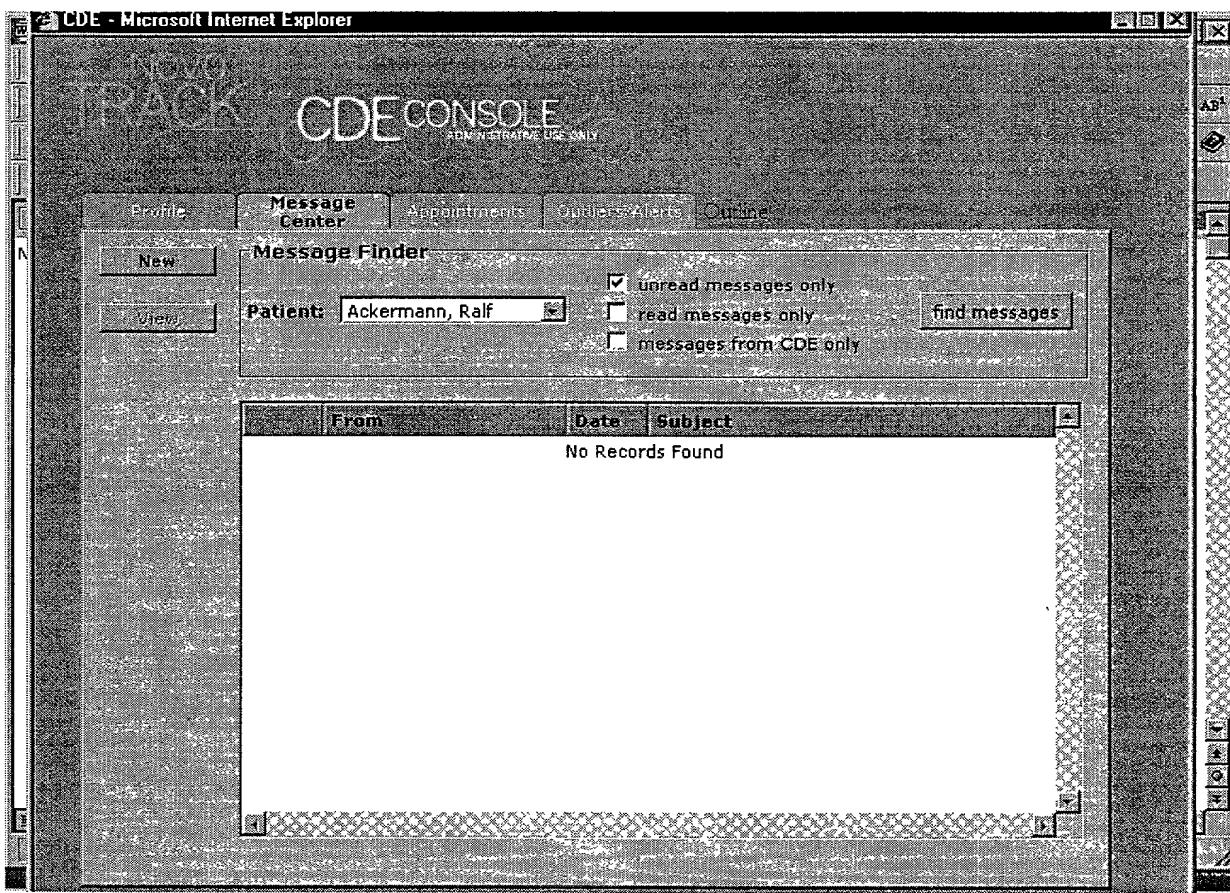


FIG. 7N

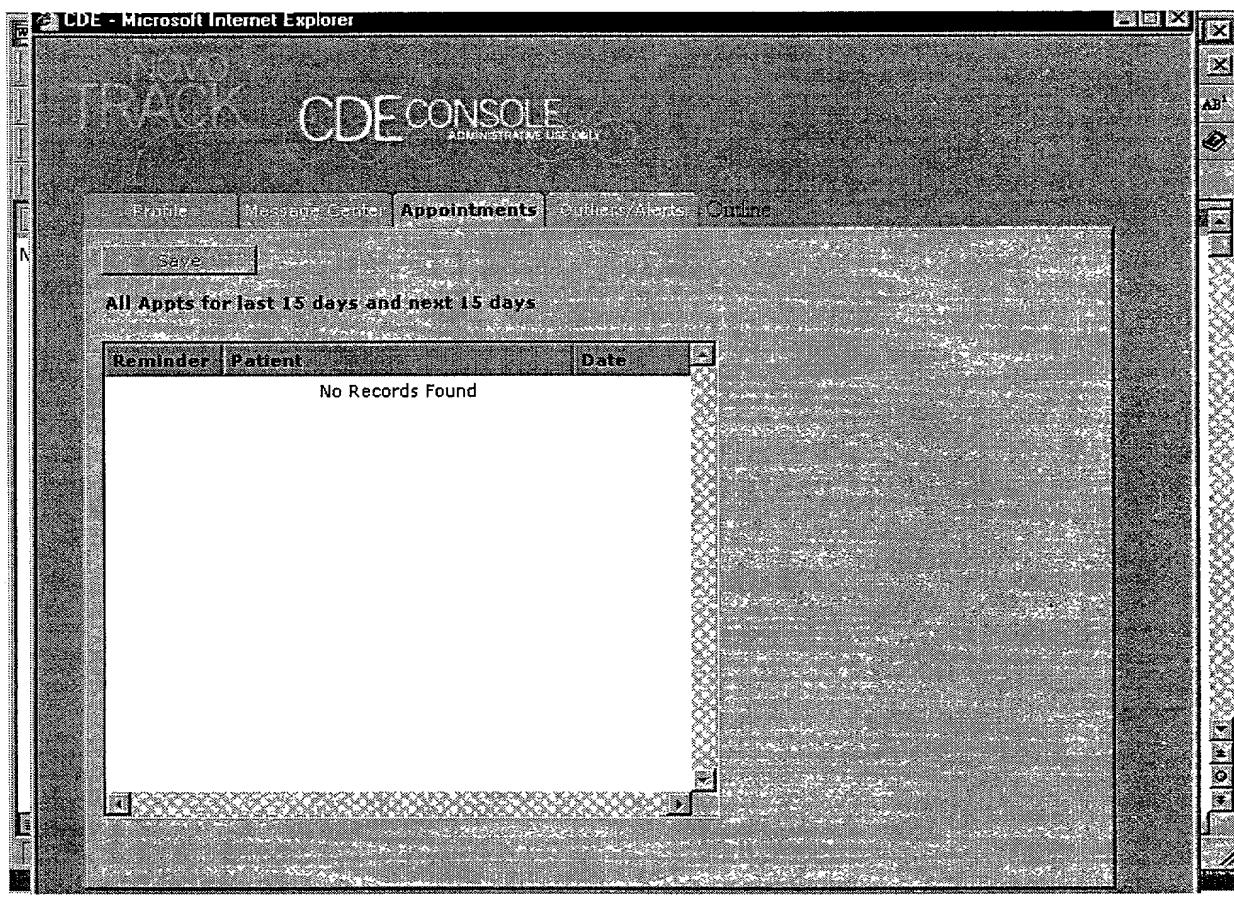


FIG. 70

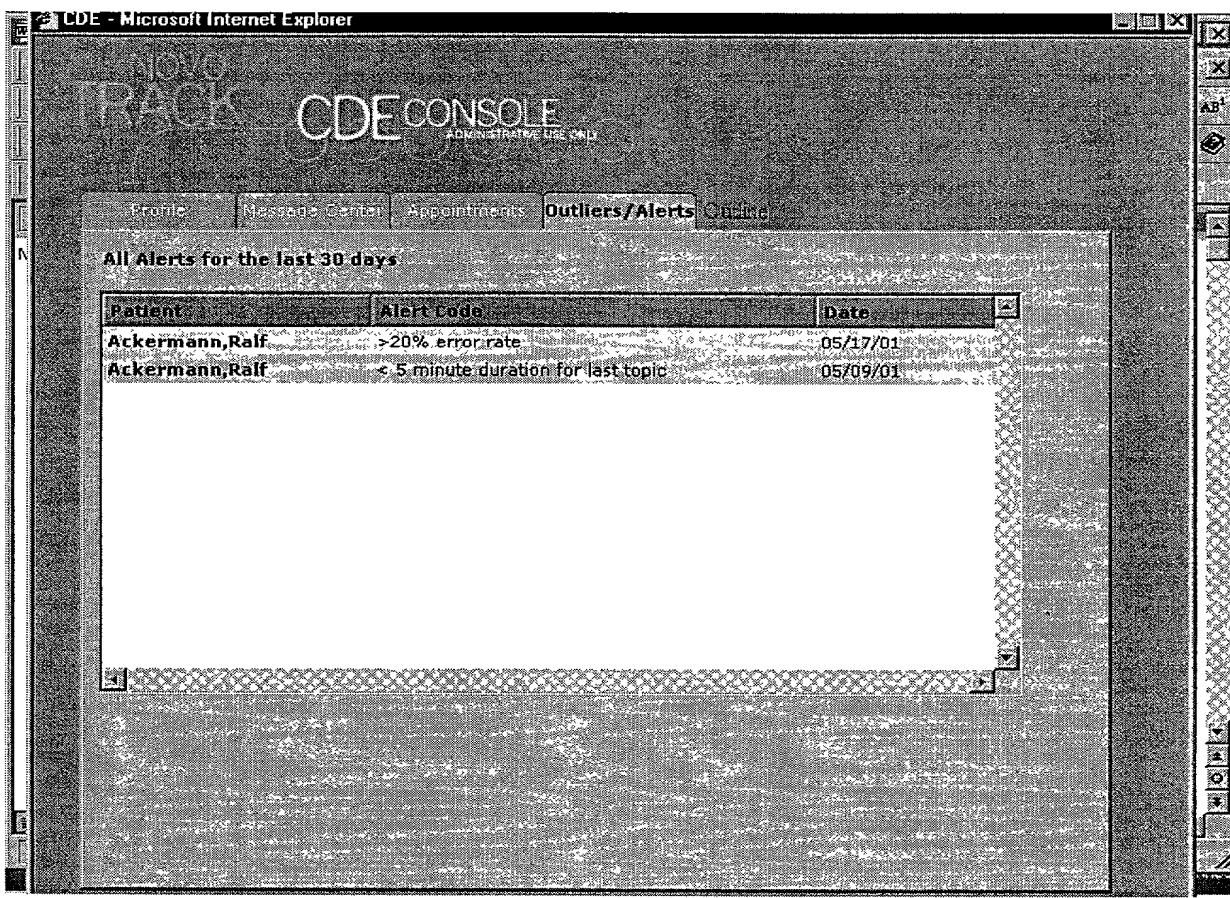


FIG. 7P

FIG. 8A

NovoTrack Guide To Good Care Outline

Key

0.0e [Title of the Topic] [Medical Record Data] [Patient Attitude Data] [Questions]

Numbering sequence is by track, then topic. Note that a letter after the number indicates a choice of article for that topic depending on patient characteristics entered by the patient in response to questions at the time of registration. Both the CDE and patient can edit data if required.

Track 1 - Getting Good Care (4 articles: This section has 1 **Medical Record** choice and 1 **Patient Attitude** response at registration to choose perspective for the articles.)

1.1	Defining Quality Care			Questions
1.2a	Caring for Yourself	New Diagnosis		Questions
1.2b	Caring for Yourself	Established Patterns		Questions
1.3	Your Diabetes Care Team			Questions
1.4a	Proof that Good Care Matters	Type 1		Questions
1.4b	Proof that Good Care Matters	Type 2		Questions

Track 2 - What is Diabetes (4 articles: This section has 1 **Medical Record** choice at registration to choose perspective for the articles.)

2.1	Before You Had Diabetes			Questions
2.2a	What Causes Diabetes	Type 1		Questions
2.2b	What Causes Diabetes	Type 2		Questions
2.3a	Effects of Diabetes	Type 1		Questions
2.3b	Effects of Diabetes	Type 2		Questions
2.4a	Who Gets Diabetes	Type 1		Questions
2.4b	Who Gets Diabetes	Type 2		Questions

Track 3 - Healthy Eating & Exercise (2 articles: This section has 2 **Medical Record** choices and 1 **Patient Attitude** response at registration to choose perspective for the articles.)

3.1a	Healthy Eating	Type 1		Questions
3.1b	Healthy Eating	Type 2		Questions
3.1c	Healthy Eating	BMI < 28		Questions
3.2a	Healthy Exercise	Type 2		Questions
3.2b	Healthy Exercise	BMI > 28		Questions
3.2c	Healthy Exercise	Type 1	Sedentary	Questions
3.2d	Healthy Exercise	Type 1	Active	Questions
3.2e	Healthy Exercise	Type 2	Disabled	Questions
3.2f	Healthy Exercise	Type 2	Sedentary	Questions
			Active	Questions
			Disabled	Questions

Track 4 - Using Medications Wisely (8 articles: This section has 1 **Medical Record** choice and 2 **Patient Attitude** responses at registration to choose perspective for the articles.)

FIG. 8B

4.1a	<u>Choosing The Right Insulin</u>	Type 1	Questions
4.1b	<u>How Diabetes Medications Work</u>	Type 2	Questions
4.2a	<u>Intensive Insulin Therapy</u>	Type 1	Questions
4.2b	<u>Combinations Of Medications</u>	Type 2	Questions
4.3a	<u>Practical Tips For Insulin Use</u>	Type 1	Questions
4.3b	<u>Insulin For Your Diabetes</u>	Type 2	Questions
4.3c	<u>Insulin For Your Diabetes</u>	Type 2	Questions
4.4a	<u>Hypoglycemia</u>	Type 1	Questions
4.4b	<u>Hypoglycemia</u>	Type 2	Questions
4.5a	<u>Monitoring Your Blood Sugar</u>	Type 1	Infrequent Monitoring
4.5b	<u>Monitoring Your Blood Sugar</u>	Type 1	Frequent Monitoring
4.5c	<u>Monitoring Your Blood Sugar</u>	Type 2	Infrequent Monitoring
4.5d	<u>Monitoring Your Blood Sugar</u>	Type 2	Frequent Monitoring
4.6	<u>Treating High Cholesterol</u>		Questions
4.7	<u>Treating High Blood Pressure</u>		Questions
4.8	<u>Benefits of Aspirin</u>		Questions

Track 5 - Family, Friends & Feelings (4 articles: This section has 1 Patient Attitude response at registration to choose perspective for the articles.)

5.1a	<u>A Healthy Attitude</u>	Optimistic	Questions
5.1b	<u>A Healthy Attitude</u>	Balanced	Questions
5.1c	<u>A Healthy Attitude</u>	Pessimistic	Questions
5.2	<u>Setting Goals</u>		Questions
5.3	<u>Family & Friends</u>		Questions
5.4	<u>Getting Help</u>		Questions

Track 6 - Complications (7 articles: This section has 5 Medical Record choices and 1 Patient Attitude response at registration to choose perspective for the articles.)

6.1a	<u>Preventing Retinopathy</u>	Complication Absent	Questions
6.1b	<u>Treating Retinopathy</u>	Complication Present	Questions
6.2a	<u>Preventing Neuropathy</u>	Complication Absent	Questions
6.2b	<u>Treating Neuropathy</u>	Complication Present	Questions
6.3a	<u>Preventing Nephropathy</u>	Complication Absent	Questions
6.3b	<u>Treating Nephropathy</u>	Complication Present	Questions
6.4a	<u>Foot Care</u>	Low Risk	Questions
6.4b	<u>Foot Care</u>	High Risk	Questions
6.5a	<u>Preventing Heart Disease</u>	No Ischemia	Questions
6.5b	<u>Treating Heart Disease</u>	Prior/Current Ischemia	Questions

FIG. 8C

<u>6.6a</u>	<u>Smoking</u>	<u>Nonsmoker</u>	<u>Questions</u>
<u>6.6b</u>	<u>Smoking</u>	<u>Smokes - Wants to quit</u>	<u>Questions</u>
<u>6.6c</u>	<u>Smoking</u>	<u>Smokes - Doesn't want to quit</u>	<u>Questions</u>
<u>6.7</u>	<u>Dental Care</u>		<u>Questions</u>

Track 7 - Special Situations (5 articles: This section has 3 Medical Record choices at registration to choose perspective for the articles.)

<u>7.1a</u>	<u>Driving</u>	<u>Type 1</u>	<u>Questions</u>
<u>7.1b</u>	<u>Driving</u>	<u>Type 2</u>	<u>Questions</u>
<u>7.2a</u>	<u>Traveling</u>	<u>Type 1</u>	<u>Questions</u>
<u>7.2b</u>	<u>Traveling</u>	<u>Type 2</u>	<u>Questions</u>
<u>7.3a</u>	<u>Employment</u>	<u>< 62 years old</u>	<u>Questions</u>
<u>7.3b</u>	<u>Retirement</u>	<u>> 62 years old</u>	<u>Questions</u>
<u>7.4a</u>	<u>Insurance</u>	<u>< 62 years old</u>	<u>Questions</u>
<u>7.4b</u>	<u>Medicare</u>	<u>> 62 years old</u>	<u>Questions</u>
<u>7.5a</u>	<u>Men's Sexuality</u>	<u>Male</u>	<u>Questions</u>
<u>7.5b</u>	<u>Women's Sexuality</u>	<u>Female, < 45 years old</u>	<u>Questions</u>
<u>7.5c</u>	<u>Women's Sexuality</u>	<u>Female, > 45 years old</u>	<u>Questions</u>
<u>7.6a</u>	<u>Sick Days</u>	<u>Type 1</u>	<u>Questions</u>
<u>7.6b</u>	<u>Sick Days</u>	<u>Type 2</u>	<u>Questions</u>

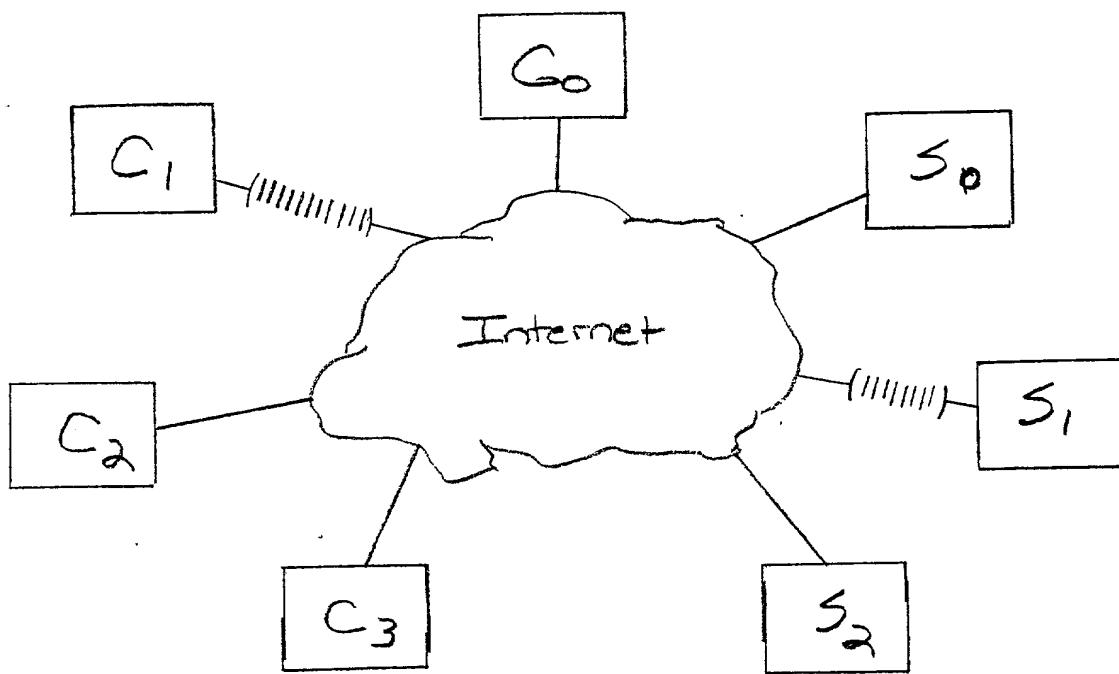


FIG. 9
PRIOR ART

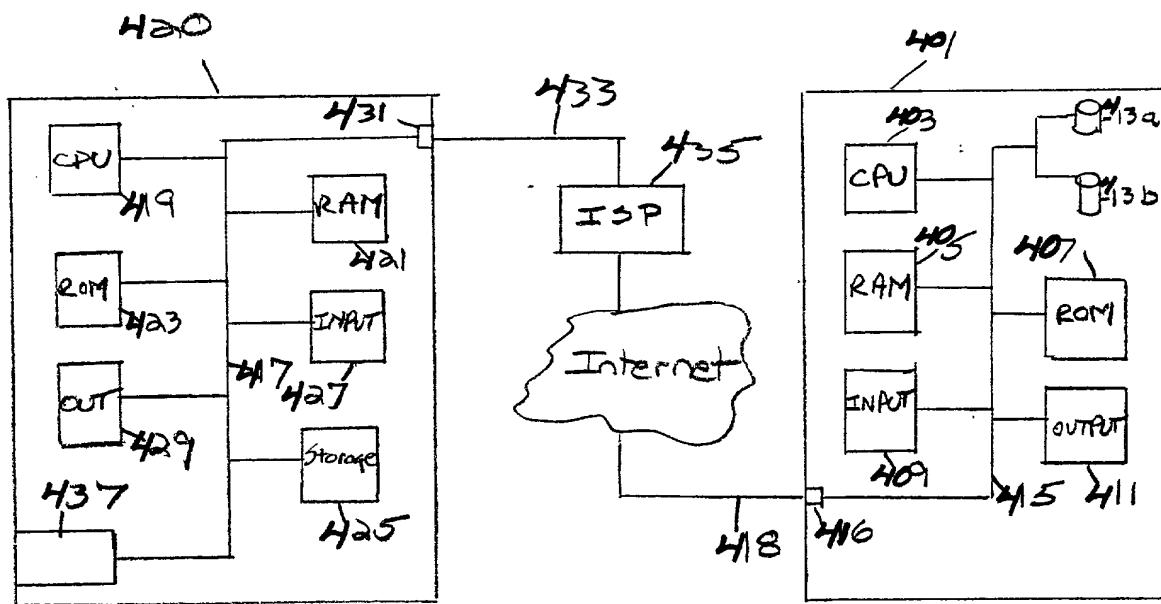


FIG. 10
PRIOR ART